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Bowman

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(54) POINTING DEVICES, APPARATUS, SYSTEMS AND METHODS FOR HIGH SHOCK ENVIRONMENTS

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This patent is subject to a terminal dis-

claimer.

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- (52) **U.S. CI.** CPC *F41G 1/35* (2013.01); *F41G 11/005* (2013.01); *F41G 1/36* (2013.01)
- (58) Field of Classification Search
 NoneSee application file for complete search history.

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(57) ABSTRACT

Devices, apparatus, systems and methods for providing accurate linear and angular positioning with a payload mounted to a beam having freely moveable ends. The payload can be a laser pointer mounted on a firearm, which maintains the initial precise pointing during and after exposure in high G shock and vibration environments. Vertical and lateral adjustment controls can adjust minute changes in beam orientation. Precision adjustments can be performed in a zero G, one G, or high G environment and maintains the adjustment during and after being exposed to a high G shock or vibration environment.

14 Claims, 29 Drawing Sheets

